



Medical faculty establishing neuroscience study centre

The Faculty of Medicine is to establish a centre for the study of nervous disease in the Toronto Western Hospital. Unlike most of the work that has been undertaken in Toronto in this field to date, the emphasis will be on biochemistry, immunology and cell biology, where notable advances have recently been achieved in our understanding of some nervous conditions in non-human primates.

A special priority will be given to the understanding and control of multiple sclerosis, polyneuritis and other so-called de-myelinating diseases — the major crippling diseases — that poliomyelitis has been controlled by vaccines. (Myelin, a fat-like substance, is a major component of the sheath that surrounds and insulates nerve fibres. When some pathological condition causes the myelin sheath to deteriorate, "short circuits" occur and communication is interrupted between the brain and muscles and such organs as the eyes.)

Work at the new Centre will be financed initially by the proceeds of a gift, made to the University of Toronto by the late Stuart B. Playfair in memory of his wife, Helen Scott Playfair. It will be known as the Playfair Neuroscience Centre.

President John R. Evans said the unit will occupy about 6,000

net square feet of assignable laboratory space soon to be made ready by the Toronto Western Hospital.

The first director

The first director of the Centre will be Dr. Edwin H. Eylar, 40, a distinguished biochemist and neuroscientist. He was until recently director of the Department of Experimental Biology of the Merck Institute in New Jersey and is now professor in the Medical University of South Carolina.

Dr. Eylar has for some years been collaborating with Dr. William Sheremata of Montreal and others on the study of an experimental form of allergic encephalomyelitis in monkeys that has many points of resemblance to multiple sclerosis in humans. Both seem to result when the body's own defence mechanisms start attacking the myelin sheaths of nerves, causing a progressively more serious interference with nerve communication between the brain and the rest of the body.

Dr. Eylar and his collaborators had demonstrated as far back as 1972 that the experimental condition in monkeys could be cured by an injection of certain proteins from the peripheral nervous system, even when the disease had

reached an advanced stage and the animal was near death.

There were important differences, however, between the experimental disease, as induced in monkeys, and the natural condition in humans. In monkeys, for example, the disease is quickly fatal; in humans, it may run its course for many years, with periodic remissions and relapses.

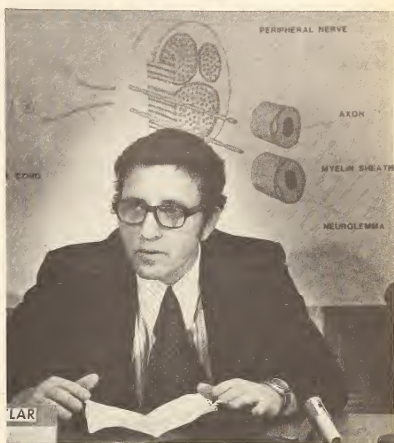
Striking resemblances

In 1974, Dr. Eylar, Dr. Sheremata and their colleagues, who had been studying the diseases at the molecular level, reported their discovery of striking resemblances in the immunological mechanisms that were at work in both the experimental condition in monkeys and in the human disease. They were also able to identify and synthesize the disease-causing sites in both monkeys and humans.

When neurologists from many parts of the world gathered in New Jersey last summer to review the work there was unanimous agreement that the new discoveries were of great significance and that more intense study should be made of the disease in humans.

One of the major objectives of the team at the Toronto Western

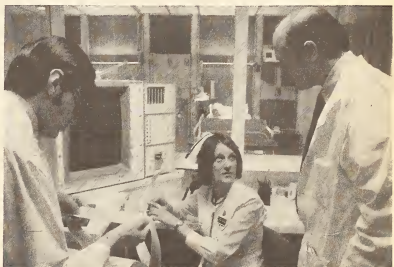
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Dr. Edwin H. Eylar

First director of the Playfair Neuroscience Centre

Stroke unit to fight third largest killer



Dr. V. Hachinski, Dr. J.W. Norris, and nurse with monitoring equipment

Three by-elections may be needed in '75-'76 General Council voting

Three teaching staff members of Governing Council have given notice of their desire to resign before the completion of the terms for which they were elected.

If Council accepts the resignations, there will be seven teaching staff seats to fill in the election that begins with nominations starting on Jan. 27, as well as the eight student seats, for which voting takes place annually.

The members resigning are Prof. John E. Dove and Prof. Harold Smith, elected last year for three year terms, and Dr. J.C. Laidlaw, whose term expires in 1976. Prof. Dove is chairman of the Academic Affairs committee.

Why they wish to resign

Prof. Dove has submitted that the combined load of his teaching duties, Council membership, and the chairmanship of one of its key

committees has become too onerous. Dr. Laidlaw is leaving U of T at the end of June to become chairman of the department of medicine at the McMaster medical school, and Prof. Smith is assuming responsibilities in the School of Graduate Studies that will remove him from the constituency he represents on Council.

Councillors whose terms run out on June 30 of this year are Profs. Harry C. Eastman, Charles Hanly, W. Barry Coultas, and Michael Grapko. They were elected for three years each in the first Governing Council election in 1972 and can be renominated and seek re-election.

Students whose one year in office ends on June 30 are four who hold undergraduate seats: Shirley French, Peter Jarrett, Stephen Moses, and David Shindman; two representing graduate students: Kitty Hoffman and E. Vernon Copeland, and two representing

part-time undergraduates: Ariene Dick and William J. Whelton.

Nominations will remain open from Jan. 27 until 12 noon, Feb. 14. Nomination forms will be available on and after the 27th from the Governing Council secretariat, Room 106, Simcoe Hall, and at the offices of the registrars at Erindale and Scarborough Colleges. Inquiries may be directed to the Secretariat at 928-2160.

No admin. staff election

An election for the two administrative staff seats is not necessary this year, as Keith R. Bowler was elected in 1974 for a three-year term, and Gwen Russell has another year to go after June 30.

The alumni College of Electors is currently holding an election to fill the seats vacated by three alumni members whose terms expire at the end of June. The incumbents, who can be renominated, are Patti Fleury, C. Ian P. Tate, and Harry J. Riva.

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For more
medical news
Better treatment
of spinal injuries
Wheelchair with
racing stripes



Harold W. Smith

J.C. Laidlaw

John E. Dove

STAFF NOTES

Music professor wins film award

Chairman of the graduate department of music, PROF. LOTHAR KLEIN, last year composed and conducted the original film score for the educational documentary *The Edge of Evolution*, which was recently cited as "the outstanding Canadian educational-documentary film of 1974" by the Canadian Association of film producers. The 45-minute film was produced by Imperial Ltd. in collaboration with the University of New Brunswick.

This is the second time Prof. Klein's work has been so cited. In 1964 he received the Golden Reel Award of the American Academy of Film Sciences for his score to a theatre documentary, *An Actor Prepares*.



Prof. Lothar Klein

Victoria College

PROF. CHARLES N. GENNO was elected chairman of the Ontario Association of Teachers of German at the annual meeting on Nov. 2. PROF. WOLFGANG HEMPEL of St. Michael's College was elected treasurer.

Erindale College

PROF. DESMOND MORTON served as resource person at a conference of university and community college governors sponsored by the Ontario Federation of Labour on Oct. 3. His article on "Ontario Today" has been accepted to introduce a textbook on government and politics in Ontario to be published by Macmillan in the new year.

PROF. ANDRE L. STEIN has had his book *L'Écologie de l'Argot Ancien*, published by Librairie Nizet, Paris, 1974, 306 pages.

PROF. DAVID DUNLOP and Monika Bialy, Chris Hale and Srinivas Thannar from the Rock Magnetism Laboratory attended the Taseki Nagata Conference in Pittsburgh, June 3-4. The conference was held to honour Prof. Nagata, who has been a leader in both rock magnetism and lunar research, on the occasion of his retirement from the University of Tokyo's Geophysical Institute and his appointment as Director of Japan's Institute for Polar Research. The areas in which Prof. Nagata has made outstanding contributions were described in ten review papers (one on "Rock Magnetism - Basis of the Paleomagnetic Record" given by Dr. Dunlop), each followed by informal discussions. About one hundred scientists and students attended and all agreed that the conference was an unusually successful survey of the state of the art in earth and planetary magnetism.

In the July 26 issue of *Nature* PROF. MICHAEL KIMBERLEY proposed new solutions to the long-debated origins of iron and uranium ores. Iron, and uranium-rich sedimentary rocks, contain evidence of algal life on earth for at least the last two thousand years and burial of organic matter has been found to control concentration of iron and uranium. The chemically precipitated concentration of aluminum in such old iron ores indicates the existence of life on land as well as in shallow seas.

PROF. D. MORTON delivered a paper to the Military History Club of Hamilton on Oct. 16. His topic was "Sir William Otter: A Case Study of Branch Plant Provincialism". The club is jointly sponsored by McMaster University and the Hamilton Military Institute.

PROF. R. RACINE visited the Kitt Peak National Observatory in Tucson, Arizona, Aug. 19-23, to discuss the auxiliary instrumentation of the Canada-France-Hawaii

telescope with KPNO astronomers and engineers. He was in Paris and at the Meudon Observatory, Sept. 23-28, attending CFHT working group meetings and chairing a session on Photometric Equipment. On Oct. 11 he gave a colloquium to the Department of Astronomy of the University of Pennsylvania (Philadelphia) on "Global Clusters and Galactic Halos" and attended an IAU Colloquium on "Multicolor Photometry", for which he was awarded organizer, in Albany, N.Y., Oct. 24-27.

PROF. E.T. SILVA read a paper "From Kraacauer to Hollywood: Suggestions for Revisions based on New Data from the 1920's" to the annual midwest meeting of the Popular Culture Association held in Chicago, Oct. 10-12. While in Chicago, he also spoke at the University of Illinois (Circulus Campus) on "The First Family: Kinship Connections Among the American Presidents".

PROF. J. SIMPSON read a paper entitled "On the Trail of the Sacred: The Social Psychology of Backpacking" at the annual meeting of the Society for the Scientific Study of Religion, Oct. 24-27, in Washington, D.C.

Medicine

PROFS. NANCY JOY, MARGOT MACKAY and GARY COUSINS attended a meeting of the (international) Association of Medical Illustrators (AMI) in New Orleans, Oct. 19-23. Prof. Joy has been appointed member of the AMI Council on Education for 1974-75. The AMI, in collaboration with The Health Sciences Communication Association, has recently published Vol. 1, No. 1 of "The Journal of Bio-Communications", which succeeds the Medical Art Journal of the Association of Medical Illustrators which has ceased publication. A meeting of the Canadian Academy of Medical Artists (CAMA) was held at Sunnybrook Hospital on Oct. 17 and 18. Prof. Gary Cousins gave the Presidential address. PROF. FREDERICK LAMMERICH gave a demonstration on three-point perspective, and Dr. Storey, as it relates to Medical Art. PROF. ALEX WRIGHT attended a meeting of the American Society of Plastic and Reconstructive Surgeons, Oct. 28-31 in Houston, Texas, and gave a paper "Facial Reconstruction: New Tools for Planning, Documentation and Follow-up".

DR. CALVIN EZRIN, DR. EVA HORVATH, and DR. KALMAN KOVACS were invited to lecture on the pituitary gland during the course "Pathology of the Endocrine Glands" at Harvard Medical School, Boston, which was held Nov. 4-9. This is the first time in the 15 year history of the course that lecturers other than the staff of the Harvard Medical School have been asked to participate.

On Oct. 1 on invitation of the Board of Health and the Department of Public Health, City of Toronto, DR. MICHAEL LENCZNER gave an address on "Parasitic and Tropical Diseases: The Change in Pattern of Public Health."

DR. PAUL G. WALFISH attended the American Endocrine and American Diabetes Association meetings held in Atlanta, Ga. June 12-16. He also attended the American Thyroid Association meeting Sept. 18-21 in St. Louis, Mo. and a paper entitled "Screening for Neonatal Hypothyroidism using Dried Capillary Blood: Observations on Sample Collections and Haematocrit Variations" was presented indicating his current progress in his National Health and Welfare grant program entitled "Early Detection of Hypothyroidism in the Newborn and the Prevention of Mental Retardation".

Dentistry

DR. D.G. WOODSIDE participated at the Great Lakes Society of Orthodontists meeting on Oct. 5 and 6. The senior orthodontic graduate students presented a table clinic during this meeting.

DR. D.B. MACADAM recently attended a three-day seminar at the University of Michigan on "Dental Materials."

DR. W.D. MACKEY attended at Dental Materials Conference at Ann Arbor, Michigan on Oct. 2 to 4 on the subject "Advances in Direct Restorative Materials".

DR. A.M. HUNT presented a paper entitled "Public Dental Services in Britain, the Scandinavian Countries and the Union of Soviet Socialist Republics" to the Canadian Society of Public Health Dentists at Kimberley, Ont. on Oct. 5.

DR. A.B. HORD addressed the Bytown General Practice Academy on Oct. 19. He also attended the Dental Materials Conference at the University of Michigan on Oct. 2 to 4.

DRS. B.J. SESSLE and L.F. GREENWOOD were panel members of the session "Dental Pain: Its Origin and Control" at the Canadian Dental Association Convention in Toronto from Oct. 6 to 9. Dr. Sessle gave an invited talk entitled "Feedback and Oral Facial Motility" at the 27th Annual Conference on Engineering in Medicine and Biology in Philadelphia from Oct. 6 to 10. Dr. Sessle has been awarded a three-year contract grant from the National Institutes of Child Health and Human Development, Bethesda, for a study entitled "Neural Mechanisms Involved in the Functions of the Upper Respiratory Tract". The Institute sees a vital need for studies of development of the structure and function of the upper respiratory tract to provide baseline information pertinent to the elucidation of the sudden infant (crib) death syndrome. The proposed study would investigate the effects of sensory feedback from larynx, pharynx and orofacial regions on brain cells involved in respiratory functions in infant and adult animals. Co-investigators on the project will be DRS. A.T. STOREY and L.F. Greenwood.

DR. A.R. TEN CATE has been appointed to serve as a member of the Provincial Task Force to study health research requirements of the Province over the next decade.

DR. D.G. WOODSIDE presented a five-day program to the Spanish Society of Orthodontists in Torremolinos, Spain, Oct. 14-18.

RESEARCH NEWS

Dossier of Key Research Areas

As an addition to its service function, ORA has begun, for the federal government, the compilation of a dossier of research areas in which the U of T has particular strength.

Department chairmen and deans have been asked to help in the identification of distinctive research capabilities. ORA has frequently been asked for listings of such areas not only by federal but also provincial agencies, and the dossier compilation represents an effort to establish a systematic and complete, rather than ad hoc or merely quantitative, file of the University's major research resources. It is hoped that such a dossier, once compiled and coordinated, may easily be used on a regular basis. It also hoped that such a dossier may regularly be useful in compiling data on comparative funding levels and in seeking additional research funding.

Ministry of the Environment

The Air Resources Branch of the Ministry of the Environment is accepting research grant proposals for the fiscal year 1975-76. Applications should be forwarded to ORA by Feb. 17 in order to reach the agency by the deadline. The necessary signatures and a completed form ORA 5 are required as usual.

Medical Research Council and Health & Welfare Canada

A clearer definition of the areas of research support has been provided by MRC and Health and Welfare Canada. MRC provides support for research projects in the health sciences and clinical trials for assessment and validation of diagnostic and treatment procedures. Health and Welfare Canada provides support for health care research problems and suggestions for improvement of health related practices, disease prevention, and the need for health services. Copies of the statement explaining this information in more detail have been sent to the Dean of Medicine for distribution or are available from ORA by calling 928-2874.

Canada Council Explorations Program

Closing dates for applications to the explorations program have been changed. The new dates are: March 1, June 1, and Dec. 1, for receipt in Ottawa. Information concerning the program is available from ORA by calling 928-2874.

Ministry of Education

Grants in aid of educational research are available from the Ministry of Education. Applications, in 13 copies, should reach ORA by March 3. Information has been sent to chairmen of some departments and may also be obtained from ORA by calling 928-2874.

UN program supports feasibility studies

The following letter is from Douglas Lindores, First Secretary, Permanent Mission of Canada in the United Nations:

You may be aware that the United Nations Development Program provides technical assistance and pre-investment feasibility services to developing countries throughout the world. One of the key elements in the execution of projects is the UNDP Projects Execution Division within the UNDP Headquarters in New York.

The Director of this Division has recently asked our assistance in establishing contact with key members of the various faculties of the University of Toronto. The Division has a large budget for financing academic personnel in studies designed to identify and analyse economic development projects for eventual funding by the UNDP or other development agencies. Certain areas of expertise such as economics, regional economic planning, government administration, management information systems, export trade promotion, etc., are obviously required by the UNDP. I would be grateful if you could forward to me a list of key contacts in any faculty of your university which you feel would be interested in and capable of undertaking assignments in virtually all fields of development. Your assistance in this matter will be greatly appreciated.

Interested persons should write directly to Mr. Lindores at Suite 250, 866 United Nations Plaza, New York, N.Y., 10017, U.S.A.

WUSC makes appeal for hurricane Fifi victims

The World University Service of Canada has sent the following open letter to the faculty at U of T:

In the wake of Hurricane Fifi, World University Service of Canada is appealing to Canadian colleges and universities to raise funds in support of a World University Service of Honduras reconstruction project to help some of the 350,000 hurricane victims.

The project will provide 100 houses; two wells of drinking water; 100 sewing machines for cottage industry; 600 army coats for the homeless; and 50 sets of camping equipment for student relief workers.

To support this appeal, World

University Service of Canada has produced a sound slide show depicting life in Honduras both before and after September's Hurricane Fifi. Gale force winds and torrential rains brought severe flooding and wide-scale destruction roughly estimated at 15,000 dead; 30,000 isolated or missing; 10,000 homeless and 80,000 homes destroyed.

University of Honduras personnel have each donated one day's pay for the victims to the National Emergency Committee.

World University Service of Canada is asking for a donation from faculty members in Canada. They can be made out to WUSC and sent to Prof. Andre Gombay in the Department of Philosophy.

Sunnybrook opens special unit to treat spinal cord injuries

A spinal injury can happen to anyone - the most common cause is a motor accident - and the result can be permanent paralysis of the legs, bladder and bowel. The key to avoiding this result is quick and modern treatment, and to make this possible the Ontario Ministry of Health has recently given a two-year grant of \$94,000 to the Sunnybrook Medical Centre. The grant is to make possible the updating of the Centre's Acute Spinal Cord Injury Unit as the major facility of its kind in Ontario and as a model for other treatment centres.

Speedy action aids recovery

Damage to the spine is frequently followed by a progressive decrease in blood flow to the nerve cord, and a corresponding decline in oxygen level. Death of the nerve cells, which the body

cannot replace, can ensue within a few hours.

There are, however, forms of treatment which prevent this occurring. "If we could have transfer to Sunnybrook within an hour or two of the spinal cord injury, chances of recovery would be significantly increased", says Dr. Charles Tator, associate professor of medicine, and head of the division of neurosurgery at Sunnybrook. The Centre is ideally suited for this purpose, with its own helicopter to facilitate swift transfer of patients from remote areas, and a team of specialists with extensive experience in treating spinal cord injuries.

Treatment involves a number of procedures requiring different expertise. Special x-rays of the spine are taken, using dye injections to show up the site of the damage. Transmission of nerve impulses through the injured area is tested

by stimulating the nerves on one side and recording the response at the other.

The initial management of the injury also often requires immediate relief of pressure on the spine and immobilization of the vertebral column. Because spinal injury means loss of control of the body below the site of damage, management of the urinary tract is also important, and in addition to the neurosurgeon, neuro-radiologist and neuropsychologist the team includes an orthopaedic surgeon, urologist, physiotherapist and specially trained nurses and orderlies.

Major cause of mortality

One particular problem faced by patients who have lost their sense of feeling is to prevent pressure sores, which are a major cause of mortality in these patients. Through lying or sitting on the same part of the body all the time, circulation to that part becomes restricted, the muscle loses tone, and chronic septicemia (blood poisoning) can set in and spread to the rest of the body. Patients must be educated to change their position regularly, as part of the rehabilitation program.

Dr. Tator is confident that the operative treatment and drug therapy methods used at Sunnybrook "allow us to treat critically injured spinal cord patients with significantly better results than were possible five years ago." It is anticipated that the Unit will eventually operate at the rate of one new patient every two weeks and that there will be approximately six patients nursed in the Unit at any one time. With the immediate treatment they receive and new methods of health care, rehabilitation will be accelerated and costs reduced.



Wheelchair with stripes

A wheelchair with racing stripes?

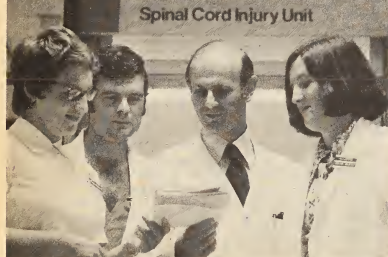
The latest wheelchair designed and produced at the Hospital for Sick Children does have racing stripes, but this is just one of its special features.

The chair, designed specifically for patients with muscular dystrophy, is actually a brace designed to prevent spinal curvature.

Designed for an everyday home-and-school environment, the chair is cleanable, lightweight and easily disassembled. The whole seat can be removed and used as a car seat. Since close follow-up, using standardized X-rays, is crucial for its assessment, the hospital's Department of Medical Engineering has designed a special X-ray chair that holds the child stable but without spinal support. Vertical and horizontal calibrated bars that show up on the X-ray give the orthopaedic specialist a standard frame of reference for assessing the degree of scoliosis.

In the 14 months the chair has been in use, spinal curvature and preliminary results are most encouraging. There are 13 patients using the chair now, and their ages range from eight to 14. Six of them live at home; the remaining seven are in special residences. All enthusiastically endorse the model which allows them to sit comfortably for nine to 14 hours at a time as opposed to two or three hours at a time with a conventional wheelchair.

The chair project is supported by grants from the Muscular Dystrophy Association of Canada and Health and Welfare Canada to Dr. Donald Gibson, chief of orthopaedic surgery, and Dr. Michael Albisser, director of medical engineering. Jan Koreska, the bio-engineer responsible for the design, has a structural engineering background, a Master's degree in the mechanical properties of bone, and several years' experience at a Danish orthopaedic hospital.



Members of the Spinal Cord Injury Unit team, left to right: Janet Smith, head nurse; Dr. G.E. Griesdale, neurosurgical resident; Dr. C.H. Tator, head, Division of Neurosurgery; and Virginia Edmonds, special studies co-ordinator. (Photograph by Ivan Creighton)

Medical faculty founds new centre

CONTINUED FROM PAGE 1

Hospital will be to press on with this work. Dr. Eylar also hopes that the Centre will serve as a point of contact and a focus for the exchange of ideas and mutual stimulation for the many Toronto groups that are working in the neurological field.

Funds accruing from the bequest by Mr. Playfair in 1961 of a block of shares, valued then at about one million dollars and now worth appreciably more, will provide for operation of the unit over an initial 10-year period and for the salaries of the director and up to five additional members of the Faculty's academic staff. It is expected that staff members will also obtain substantial support from various granting agencies for the provision of additional equipment and operating expenses.

Provided 'seed money'

The Playfair Fund has for more than a decade been used to provide "seed money" to get a wide

variety of research projects rolling in the field of neurological science at the University of Toronto. Many of these projects have been directed at gaining a better understanding of the causes and methods of controlling Parkinson's Disease, also known as the shaking palsy.

Because of the immensity and complexity of the problem, a wide variety of approaches have been employed in the Faculty of Medicine and its associated teaching hospitals. They have ranged from attempts to understand the physiology of a normally functioning nervous system, its biochemistry and electrochemical functions, to the pathology, remedial pharmacology and surgery of malfunctioning systems.

The modest but none-the-less significant successes achieved over a period of years in Toronto have served to attract a remarkably talented group of medical scientists from many parts of the world, including Dr. Ole Hornykiewicz, whose pioneer work on the biochemistry of central areas

of the brain led to therapeutic procedures based on dopamine and L-dopa, or *levodopa*.

Joining U of T July 1

Edwin Harold Eylar was born in Montana in 1934 and gained both his B.S. and M.S. from Montana State College (the second in physical chemistry). Three years later, in 1958, he gained his Ph.D. in biochemistry from Harvard University. He worked at Massachusetts General Hospital, Harvard Medical School and then, successively, at Indiana University Medical School, Southern California Medical School and as senior research associate at the Salk Institute of Biological Studies in La Jolla, Calif. He is author or co-author of more than 90 papers in various journals. Many of them deal with the biochemistry of the central and peripheral nervous systems. He will join the U of T on July 1.

Visitor in Physics

Dr. Evans Hayward, National Bureau of Standards, Washington, D.C. is Visiting Professor in the Department of Physics until January 25. She will give specialized seminars in nuclear physics at 4 p.m. on Monday, Jan. 20 in room 102; Tuesday, Jan. 21 in room 134; and Wednesday, Jan. 22 in room 102.

Prize discussions with Dr. Hayward may be arranged through either Prof. A.E. Litherland (928-3785) or Prof. K.G. McNeill (928-2940).

Students go to Iceland

Seven Scarborough College students in the Geography Division of Social Science are willing to pay \$500-600 out of their own pockets to go to Iceland this coming May and June, where they are planning to do a fairly comprehensive study of Icelandic farms.

Their leader, Prof. Edgar Jackson of Scarborough's Department of Geography, says he hopes the group will get some money through research grants, but if not, the students will pay their own way.

Why go to Iceland to study farms?

According to Prof. Jackson, who has been there three times already, the history of Icelandic farms is, well, different.

"Settlement patterns in Iceland haven't changed that much in the last 900 years," says Prof. Jackson. "Current patterns are more of an evolution than a wholesale change such as England and other European countries experienced."

In fact, some farms mentioned in ancient Icelandic sagas are still operating today, but under modern technology.

"Since the whole of central Iceland is a desert and has historically been a volcanic area, farms are found only in the peripheral lowlands, valleys, and slopes," says Prof. Jackson.

The Scarborough students plan to construct an up-to-date map of settlement patterns to compare with older ones and they will also examine physical sites, land use, and economic characteristics of farms to explain historical changes that have taken place. Iceland's small size makes it almost ideal for this type of study.

Although technology and economics have changed Icelandic farming the environment has also been an important influence, notes Prof. Jackson. "In 1703 there were 4,059 assessed farms and 3,000 abandoned ones," he says, quoting an article by Thorarinn Sigurdur, a noted geology professor at the University of Reykjavik. "This was in part attributed to the removal of woods which caused soil erosion, but a colder climate also contributed to a loss of production on the farms that were still operating."

Today, a cooling climate is reducing hay crops and some Icelanders are worrying about the effects of yet a further cooling trend. Besides Prof. Jackson, members of the Scarborough College Iceland Expedition group are: Bob Elder, Lorne Greig, Adele Harradine, Jim Leighton, Ted Morris, Barbara Porter, and Dianne Russell.

The University and the minorities

The relationship between the University and ethnic minorities in Toronto came under discussion on Wednesday night in Hart House when Dr. Dan Hill, the President's adviser on human rights, Vice-president Jill Conway, and other representatives of the University met with representatives of the visible minority press. The purpose of the meeting, at-

tended by more than 50 people, was to acquaint University personnel and student groups with the views of the visible minority press and to provide an opportunity for exchange of ideas. Many useful suggestions for the mutual benefit of the University and ethnic minorities were raised. A fuller account of the meeting will appear in next week's *Bulletin*.

COMING EVENTS

JANUARY

17 FRIDAY

Lecture - Rilke Symposium, "The Psychological Conflict in Rilke's Life", Prof. Einhart Kawerau, McMaster University, Combination Room, Trinity College, 8 p.m. (Graduate German and Goethe Institute)

18 SATURDAY

Lecture - "The Longer You Can Look Back, the Farther You Can Look Forward", Dr. Jack G. Dale, chairman, Centennial Committee, Dental Education in Canada, Convocation Hall, 8.15 p.m. (Royal Canadian Institute)

Musical - Chamber Players of Toronto, Water Hall, Edward Johnson Building, 2.30 p.m. Tickets \$2.50, students and senior citizens \$1.50 with I.D.

19 SUNDAY

Musical - Bach Youth Ensemble, Meeting Place, South Building, Erindale College, 3.30 p.m. Free (Erindale)

21 TUESDAY

Lecture - lecture by Dr. Robert Moore, High Commissioner for Guyana: 1017 New College, 8 p.m. (Latin American Studies Committee)

Lecture - "Economic Growth: Blessing or Curse?", John Olthuis, Committee for Justice and Liberty, Institute for Christian Studies, 229 College St. 8 p.m. (Association for Advancement of Christian Scholarship)

Lecture - "The Struggle for a People's Art Today", Barry Lord, S-309, Scarborough College, 8 p.m. (Scarborough)

Colloquium - "White Holes", Kayll Lake, Department of Astronomy, David Dunlop Observatory, 4 p.m. (Astronomy)

Debate - "Multinational Corporation Investment in Canada", chairman Prof. David Gauthier, Philosophy Department; and film, "The Takeover Game", 2072 South Building, Erindale, 8 p.m. (Mississauga Chapter, Committee for an Independent Canada)

22 WEDNESDAY

Lecture - "International Counterfeiting: The Euro-Dollar Market and What It Means to Canada", Prof. Lorie Tarshis, chairman, Social Science Division, R-3103 Scarborough College, 1 p.m. (Scarborough)

Lecture - "Is the Darwin-Marc Correspondence Authentic?", Prof. Lewis Feuer, Department of Sociology, 1016 New College, 40 Willocks St. 8 p.m. (HPSST)

Colloquium - "Brain Control: Reality and Fantasy", Dr. Elliot Valenstein, University of Michigan, 2117 Sidney Smith Hall, 4 p.m. (Psychology)

Meeting - Victoria Women's Association. Guest speaker, Mrs. Frank P. Fidler, former president of the V.W.A., Refreshments, Wymilwood, 150 Charles St. West, 2 p.m.

Radio - "Turkish Literature Through the Ages", CJRT-FM (91.1) 10 a.m., CJRT-FM (Islamic Studies and Open College)

Opera - "Elixir of Love" (Donizetti), Jan. 22, 24, 25 and 27. No performances Jan. 23 or 26. MacMillan Theatre, Edward Johnson Building, 8 p.m. Tickets \$3.50, students and senior citizens \$2, with I.D. Cheques payable "U of T". Enclose stamped, addressed envelope. (Music)

23 THURSDAY

Seminar - "Issues in Treatment", Series, "Research into Treatment: Problems and Opportunities", Dr. George Blake, Alcoholism Treatment Unit, Whitty, Auditorium, 33 Russell St. 12 noon. (Addiction Research Foundation)

Seminar - "Plan Generation: A Family of Design Methods Useful in Generating Physical Plans", Prof. Michael Batty, University of Reading, Pa. Visiting professor of engineering, University of Waterloo, Coach House conference room 111, 150 St. George St. 2 p.m. (Centre for Urban and Community Studies and U of T York Joint Program in Transportation)

Seminar - "Approaches to Regional Wastewater Management Problems: Optimization and Simulation Techniques", Prof. B.J. Adams, Department of Civil Engineering and Applied Mechanics, McGill University, 211 Haultain Building, 4 p.m. (IESE)

Seminar - "Stoian Chomakov: A Bulgarian Nationalist Turcophile, 1856-78", Prof. Thomas Meininger, Atkinson College, York University, Upper Library, Massey College, 8 p.m. (Russian and East European Studies)

Colloquium - "Structuralism - A Tool for Looking at Ourselves", Prof. Iain Pratts, Department of Anthropology, Carleton University, Main floor theatre, Library Sciences Building, 4 p.m. (Anthropology)

Colloquium - "High Resolution Spectroscopy", Prof. Boris Stoeckel, Department of Physics, 102 McLennan Physics Laboratories, 4.10 p.m. (Physics)

Theatre - "Aristophanes' 'Frogs'", New adaptation by Martin Hunter and Michael Macina. Directed by Martin Hunter, Hart House Theatre, Jan. 23, Feb. 1, No performances Sunday or Monday, 8.30 p.m. Tickets \$3, students \$1.50 with I.D. (Drama Centre)

Musical - Faculty of Music student ensembles, Walter Hall, Edward Johnson Building, 2.10 p.m. No tickets, no charge. (Music)

24 FRIDAY

Colloquium - "Chemical Disequilibrium - A General Cosmic Phenomenon", Dr. B. Donn, Cornell University, Ithaca, N.Y. 158 Lash Miller Chemical Laboratories, 4 p.m. (Chemistry)

Workshop - "African Music", Dr. Russell Hartenberger, special lecturer in percussion, Faculty of Music, Walter Hall, Edward Johnson Building, 1 p.m. See story this page. (Music)

Town Forum - "Can We Survive Inflation in 1975?" Panel discussion, chairman Jim McKinney, 2072 South Building, Erindale, 8 p.m. (Association of Erindale College)

25 SATURDAY

Conference - "Music for Children", National conference of the Schulwerk Society of Canada, Saturday, Jan. 25 and Sunday Jan. 26. Hermann Regner, director, Orff-Institute, Salzburg; Barbara Haselbach, professor of dance, Orff-Institute, Salzburg; Mario Duschenes, director CAMAC, Walter Hall, Edward Johnson Building. Sessions begin Saturday at 9.15 a.m., Sunday at 9.30 a.m. (Music)

Lecture - "Fungi and Human Affairs", Prof. John F. Morgan-Jones, Department of Botany, Convocation Hall, 8.15 p.m. (Royal Canadian Institute)

28 TUESDAY
Lecture - "Writers at War: Propaganda and Fiction in the World War I", Prof. Peter Buitenhuis, Department of English, McGill University; visitor to U of T on an exchange lectureship sponsored by the Combined Departments of English, Alumni Hall, Victoria College, 4.15 p.m. (Combined Depts. of English)

Colloquium: Astronomy - "Astronomical Studies in the Infra-red", Dr. Gary Grasdalen, Kirk Peak National Observatory, Tucson, Arizona. David Dunlop Observatory, 4 p.m. (Astronomy)



Seen here are students of the opera school rehearsing "Elixir of Love", opening Wednesday, Jan. 22 at the MacMillan Theatre, Edward Johnson Building.

Meeting - Inter-Varsity Christian Fellowship, Joint faculty - IVCF students' panel discussion, "Being Christian on Campus - What's In It?" Terrace Room, Wymilwood, Victoria College, 150 Charles St. West, (IVCF)

29 WEDNESDAY

Lecture - "Biological Mineralization", Dr. I. Shapiro, R.S. McLaughlin Visiting Scientist, Center for Oral Health and Research, University of Pennsylvania, Philadelphia, Room 6, 4th floor, 123 Edward St. 12.30 p.m. (Dentistry)

Lecture - "Suspended Animation", Dr. Lloyd G. Stevenson, Director, Institute for the History of Medicine, Johns Hopkins University, Baltimore, Osler Hall, Academy of Medicine, 288 Block, St. West, 8 p.m. Buffet dinner, 6 p.m., reservations 922-1134 by Jan. 24. (Academy and Associated Medical Services)

Radio - "Islamic Art Variations on Themes of Arabesque", CJRT-FM (91.1) 10 a.m. and 7.30 p.m. (Islamic Studies and Open College)

30 THURSDAY

Seminar: Addiction - "Issues in Treatment", series: "Haight-Asbury Free Medical Clinic Treatment Program", Dr. David Smith, Haight-Asbury Free Medical Clinic, San Francisco, Auditorium, 33 Russell St. 12 noon. (Addiction Research Foundation)

Musical - "Chhau - The Masked Dance of Bengal", First North American tour, ritualistic dance-drama, MacMillan Theatre, Edward Johnson Building, 8.30 p.m. Tickets \$4, students and senior citizens \$2, with I.D. Cheques payable "U of T", enclose stamped addressed envelope. (Music)

31 FRIDAY

Lecture and Clinical Convention - 17th Walter Wright Lecture and Clinical Convention. Guest of honour, Dr. Bradley Straatman, Director, Jules Stein Eye Institute, Centre for the Health Sciences, University of California at Los Angeles, Main Lecture Theatre, Toronto General Hospital, 9 a.m. (Ophthalmology section of Alumnus)

EXHIBITION

R.J. Thom, Clifford and Lawrie, Crang and Boake; exhibition of drawings, models and photographs by the architects for the Metropolitan Toronto Zoo. Exhibition Gallery, Faculty of Architecture, 9 a.m. to 6 p.m. Monday - Friday only, Jan. 30 - Feb. 14.

The Toronto premiere of Italian comic opera

"L'Elisir d'Amore", Donizetti's masterpiece of comic opera, will be given by the Opera Department of the Faculty of Music, Jan. 22, 24, 25, 27 at 8 p.m. at the MacMillan Theatre. It will be sung in English. Two casts will alternate and will be made up of Canada's leading young singers, many already members of the Canadian Opera Company and the Stratford Festival in their 1974 seasons.

"The Elixir of Love" is receiving its first Toronto performance, although its premiere dates back to Milan in 1832. It is one of Donizetti's best known operas. A delightful comedy, it is a favourite of Maestro Ernesto Barbi, who will conduct. Barbi's work has been synonymous with Italian opera in Canada since he left the Metropolitan Opera 22

years ago to join the Opera Department and the Canadian Opera Company (then the Royal Conservatory Opera Company.) He has recently been appointed musical director of the Manitoba Opera Company.

Seventy members of the University of Toronto Symphony Orchestra under the direction of Victor Feldbrill will be in the pit. A newly enlarged chorus directed by Michael Evans will be a welcome addition to this opera department production and subsequent ones.

In rehearsal since the end of October, the department has chosen to do the charming English version of the work prepared by Ruth and Thomas Martin. This team has translated many of the leading works of the Italian repertoire into English.

Rilke symposium beginning today

The Graduate Department of German and the Goethe Institut are sponsoring a Rilke Symposium, to be held Friday, Jan. 17 and Saturday, Jan. 18 in the Combination Room of Trinity College.

The symposium begins Friday afternoon at 2 p.m. At 8 p.m. Friday evening Prof. Einhart Kawerau of McMaster University will give a lecture on "The

Psychological Conflict in Rilke's Life". Prof. Kawerau will display 24 original Rilke letters and 30 autographed first editions on this occasion.

The symposium continues Saturday morning at 10 a.m. At 12 noon there will be a seminar in which everyone is invited to take part in an attempt at a joint interpretation of one or two Rilke poems.

Law lecture series in February

The Faculty of Law announces that this year's D.B. Goodman Memorial Lectures will be given by the Hon. Emmett M. Hall, formerly a Justice of the Supreme Court of Canada. They will be held in the Faculty's Moot Court Room on Tuesday, Wednesday, and Thursday, the 4th, 5th and 6th of February at 4 p.m. each

day. The title of the lectures is "The Anatomy of Inquiries".

The D.B. Goodman Memorial Lectures were established by friends of the late D.B. Goodman. Previous lecturers have been the Rt. Hon. Chief Justice Bora Laskin of the Supreme Court of Canada; the Hon. Mr. Justice Martin, a Justice of Appeal of the Supreme Court of Ontario; and J.J. Robinette, Q.C.

Special workshops for music students

The well-known percussion ensemble, "Nexus", has been awarded a \$5,000 grant by the Ontario Arts Council to present a series of student workshops in the early months of 1975. The workshops will be arranged in co-operation with the Faculty of Music. Dr. Russell Hartenberger, special lecturer in percussion for the faculty, is a member of the Nexus group. The workshops will take the form of participation sessions with groups of students, approximately 15-20 in each, in the Faculty of Music, for each of the four or five sessions.

As a send-off for the workshop

series, the Faculty of Music is presenting a larger workshop at 1 p.m. on Friday, Jan. 24 in Walter Hall in the Edward Johnson Building, which is open to all interested students and to the general public, free of charge. The subject of the opening workshop will be "African Music".

The other members of the ensemble are: Robert Becker and William Cain, graduates of the Eastman School; Michael Cruden, a student of Indian and micro-tonal music; Robin Engelman, principal percussionist, Toronto Symphony; John Wye, a former teacher of U of T.